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ABSTRACT

This report contains information on the federal funding of research and development (R&D) components of agency programs as proposed for the fiscal year (FY) 2001-2003. Research and development data are classified into the same federal budget function categories as those used in "Budget of the United States Government, Fiscal Year 2001-2003." The report is divided into three sections. Section 1, "Federal R&D Budget Authority by Budget Function" consists of six tables. For the first time, table 1 contains total combined R&D and R&D plant data. Tables 2, 3, and 6 provide an overview of Federal R&D funding in the context of requested total Federal budget authority. Table 4 contains data on Federal R&D funding for national defense and civilian programs in current and constant 1996 dollars for FYs 1955-2003. Table 5 contains data on budget authority for basic research by budget function for FYs 2001-2003. Section 2, "R&D by Specific Budget Function" presents data on R&D activities conducted within each budget function. This section consists of 18 tables that provide a summary for FYs 2001-2003. Section 3, "Historical Tables", presents two historical data series: (1) Federal R&D funding by budget function for FYs 1955-2003; and (2) Federal funding of basic research for FYs 1978-2003. (KHR)

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Federal R&D Funding by Budget Function

Fiscal Years 2001-03

Special Report

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Division of Science Resources Statistics
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National Science Foundation

August 2002

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Federal R&D Funding by Budget Function

Fiscal Years 2001–03

Special Report

Ronald L. Meeks, Project Officer

Division of Science Resources Statistics
Directorate for Social, Behavioral, and Economic Sciences

National Science Foundation

August 2002

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CONTENTS

Section		*Page*
Notes to the Reader		1
Federal R&D Budget Authority by Budget Function		5
Table 1.	Federal R&D and R&D plant budget authority, by budget function: fiscal years 2001–03	7
Table 2.	Federal R&D budget authority, by budget function: fiscal years 2001–03	8
Table 3.	Distribution of total Federal R&D budget authority, by budget function: fiscal years 2001–03	9
Table 4.	Federally funded R&D for national defense and civilian functions: fiscal years 1955–2003	10
Table 5.	Federal budget authority for basic research, by budget function: fiscal years 2001–03	12
Table 6.	Federal R&D budget authority as a percentage of total budget authority by budget function: fiscal years 2001–03	13
R&D by Specific Budget Function		15
Table 7.	Federal R&D budget authority for national defense (050): fiscal years 2001–03	17
Table 8.	Total obligational authority for Department of Defense research, development, test, and evaluation (RDT&E) budget: fiscal years 2001–03	18
Table 9.	Federal R&D budget authority for health (550): fiscal years 2001–03	20
Table 10.	Federal R&D budget authority for the National Institutes of Health (NIH): fiscal years 2001–03	21
Table 11.	Federal R&D and R&D plant budget authority for space research and technology (252): fiscal years 2001–03	22
Table 12.	Federal R&D budget authority for general science and basic research (251): fiscal years 2001–03	23
Table 13.	Federal R&D budget authority for natural resources and environment (300): fiscal years 2001–03	24
Table 14.	Federal R&D budget authority for agriculture (350): fiscal years 2001–03	25
Table 15.	Federal R&D budget authority for transportation (400): fiscal years 2001–03	26
Table 16.	Federal R&D budget authority for energy (270): fiscal years 2001–03	27

Table 17. Federal R&D budget authority for veterans benefits and services (700): fiscal years 2001–03 28

Table 18. Federal R&D budget authority for education, training, employment, and social services (500): fiscal years 2001–03 29

Table 19. Federal R&D budget authority for commerce and housing credit (370): fiscal years 2001–03 30

Table 20. Federal R&D budget authority for the Agency for International Development (AID) and other international programs (150): fiscal years 2001–03 31

Table 21. Federal R&D budget authority for administration of justice (750): fiscal years 2001–03 32

Table 22. Federal R&D budget authority for community and regional development (450): fiscal years 2001–03 33

Table 23. Federal R&D budget authority for income security (600): fiscal years 2001–03 34

Table 24. Federal R&D budget authority for general government (800): fiscal years 2001–03 35

Historical Tables 37

Table 25a. Federal R&D obligations, by selected budget function: fiscal years 1955–60 39

Table 25b. Federal R&D obligations, by selected budget function: fiscal years 1961–66 40

Table 25c. Federal R&D obligations, by budget function: fiscal years 1967–72 41

Table 25d. Federal R&D obligations, by budget function: fiscal years 1973–77 42

Table 25e. Federal R&D budget authority, by budget function: fiscal years 1978–83 43

Table 25f. Federal R&D budget authority, by budget function: fiscal years 1984–89 44

Table 25g. Federal R&D budget authority, by budget function: fiscal years 1990–95 45

Table 25h. Federal R&D budget authority, by budget function: fiscal years 1996–2003 46

Table 26a. Federal budget authority for basic research, by budget function: fiscal years 1978–83 48

Table 26b. Federal budget authority for basic research, by budget function: fiscal years 1984–89 49

Table 26c. Federal budget authority for basic research, by budget function: fiscal years 1990–95 50

Table 26d. Federal budget authority for basic research, by budget function: fiscal years 1996–2003 51

NOTES TO THE READER

This annual report contains information on Federal funding of the research and development (R&D) components of agency programs, as proposed by the administration for fiscal year (FY) 2003. R&D data in this report are classified into the same Federal budget function categories used in the *Budget of the United States Government, Fiscal Year 2003*, prepared by the Office of Management and Budget. Proposed FY 2003 funding levels are for budget authority (defined below), which is the basis for initial congressional action. In future *Budget Function* reports, these data will be revised to reflect congressional appropriation and actual program-funding decisions.

Detailed data are included on *preliminary* estimates for Federal funding of R&D in FY 2002 that reflect all past congressional actions, but may be revised, since at the time of report preparation, FY 2002 had not yet been completed. This report also includes detailed data (by subfunction) on actual budget authorizations of R&D by Federal agencies in FY 2001 and aggregate data (by broad function) on actual R&D budget authorizations in FY 2001 and earlier years.

REPORT ORGANIZATION

These notes introduce basic budget terms and concepts used in this report. The rest of the report is divided into three sections:

Federal R&D Budget Authority by Budget Function consists of six tables. Table 1 contains total combined R&D and R&D plant data. Tables 2, 3, and 6 provide an overview of Federal R&D funding in the context of requested total Federal budget authority. Table 4 contains data on Federal R&D funding for national defense and civilian programs in current and constant 1996 dollars for FYs 1955–2003. Table 5 contains data on budget authority for basic research by budget function for FYs 2001–03.

R&D by Specific Budget Function presents data on R&D activities conducted within each budget function. This section consists of 18 tables (tables 7 through 24) providing a summary for FYs 2001–03.

Historical Tables presents two historical data series: (1) Federal R&D funding by budget function for FYs 1955–2003 (tables 25a through 25h) and (2) Federal funding of basic research for FYs 1978–2003 (tables 26a through 26d).

DEFINITIONS

RESEARCH AND DEVELOPMENT

As used in this report, R&D refers to research—both basic and applied—and development activities in the sciences and engineering.

Research and Development activities comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

R&D includes those funds for personnel, program supervision, and administrative support directly associated with R&D activities. Expendable or movable equipment needed to conduct R&D—e.g., microscopes or spectrometers—is also included.

Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Research is classified as either basic or applied according to the objective of the sponsoring agency.

- In **basic research**, the objective of the sponsoring agency is to gain fuller knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind.
- In **applied research**, the objective of the sponsoring agency is to gain knowledge or understanding necessary for determining means by which a recognized and specific need may be met.

Development is the systematic use of the knowledge or understanding gained from research directed toward the production of useful materials, devices, systems, or methods, including design, development, and improvement of prototypes and new processes. It excludes quality control, routine product testing, and production.

R&D plant includes the acquisition, design, and construction of, or major repairs or alterations to, all physical facilities for use in R&D activities. Facilities include land,

buildings, and fixed capital equipment. It includes the International Space Station and such fixed facilities as reactors, wind tunnels, and particle accelerators. This report includes data on R&D plant funds. These authorizations are included in tables 1 and 11. All other tables in this report exclude R&D plant and are for R&D authorizations only.

Budget Authority, Obligations, and Outlays

The Federal R&D funding data presented here are, with a few noted exceptions, provided in budget authority. Budget authority is used because it is the initial budget parameter for congressional action on the President's proposed budget. Budget authority imposes a ceiling on obligations and outlays; obligations and outlays flow from budget authority.

- **Budget authority** is the primary source of legal authorization to enter into obligations that will result in outlays. Budget authority is most commonly granted in the form of appropriations by the congressional committees assigned to determine the budget for each function.
- **Obligations** represent the amounts for orders placed, contracts awarded, services received, and similar transactions during a given period, regardless of when the funds were appropriated and when the future payment of money is required.
- **Outlays** represent the amounts for checks issued and cash payments made during a given period, regardless of when the funds were appropriated or obligated.

Budget Functions

All activities covered by the Federal budget, including R&D, are classified into 20 broad functional categories. The Federal budget total comprises funding for these 20 functions. An agency's activities are not necessarily included in only one function. Instead, the programs of one agency typically are distributed across functions, and each function often includes programs from multiple agencies. No overlap occurs between functions or between the various agency programs within those functions. In a few cases, components of a major national effort are funded through multiple functions, such as the human genome mapping effort, which is funded under the health and general science categories.

Notably, each specific R&D activity is assigned to only one function area, consistent with the official codes used in budget documents, even though the R&D activity may address several functional concerns. For example, except for those of the U.S. Army Corps of Engineers, all R&D activities sponsored by the Department of Defense (DoD) are classified as defense, even though some activities have secondary objectives such as space or health. Moreover, only R&D funded by the Department of Health and Human Services and the Department of Labor is classified in the health function category. Yet some R&D funding, from at least three additional agencies—DoD and the Departments of Energy and Veterans Affairs—has a major health component.

The functional categories and definitions used in this report are the same as those used in the Federal budget, with one exception. R&D activities categorized as general science, space, and technology (function 250) are reported separately here. Subfunction 251 contains R&D activities for general science and basic research, and subfunction 252 contains R&D activities for space research and technology. Not all federally sponsored basic research is categorized in function 251, however; some basic research is included in 12 of the remaining 19 functional categories.

Five Federal budget functions—Medicare (function 570), social security (function 650), net interest (function 900), allowances (function 920), and undistributed offsetting receipts (function 950)—have no R&D components. Consequently, they are not discussed in this report, except where R&D is described as a proportion of total Federal budget authority.

The agency/function crosswalk on the following page lists—by name and function code—the 16 individual R&D functions funded by agencies.

Data Sources

Within the overall Federal budget there is no separately identified R&D budget as such; nor are most appropriations for R&D so labeled except in the case of certain program areas such as defense, energy, health, and environment. Consequently, most funds for R&D are not line items in an agency's budget submission but are included within general program funding. To determine funding for Federal R&D, the Office of Management and Budget (OMB) requires agencies with annual R&D

funding greater than $10 million to submit data on their R&D programs as part of their annual budget submissions. Specifically, the agencies provide data—reported, in accordance with OMB Circular A-11, MAX Schedule C, "Research and Development Activities"—on funding levels for basic research, applied research, development, R&D facilities, and major equipment for R&D.

Data in this report represent agencies' best estimates of actual and proposed Federal funding for R&D collected during the period between February and April 2002. These data are based primarily on information provided to OMB by 23 agencies and account for an estimated 99 percent of all federally sponsored R&D activities. Also incorporated in this report is R&D information that became available from the individual agencies after the administration's budget was prepared and reported in the *Budget of the United States Government*. Such information consists of agency budget justification documents submitted to Congress and supplemental, program-specific information obtained from agency budget and program staff through mid-March 2002. Therefore, budget numbers for individual activities, programs, or agencies may differ slightly from those published in the President's budget or agency budget documents.

AGENCY/FUNCTION CROSSWALK

AGENCIES	FUNCTIONS																
	National defense (050)	Health (556)	Space research and technology (252)	General science (251)	Energy (270)	Transportation (400)	Natural resources and environment (300)	Agriculture (350)	Education, training, employment, and social services (500)	Veterans benefits and services (700)	International affairs (150)	Commerce and housing credit (370)	Community and regional development (450)	Administration of justice (750)	Income security (600)	General government (800)
Agency for International Development											●					
Corps of Engineers (Civil)							●									
Dept. of Agriculture							●	●								
Dept. of Commerce							●					●	●			
Dept. of Defense (Military)	●															
Dept. of Education									●							
Dept. of Energy	●			●	●											
Dept. of Health and Human Services		●							●							
Dept. of Housing and Urban Development													●			
Dept. of Justice														●		
Dept. of Labor		●							●							
Dept. of the Interior							●									
Dept. of the Treasury																●
Dept. of Transportation						●										
Dept. of Veterans Affairs										●						
Environmental Protection Agency							●									
National Aeronautics and Space Adm.			●			●										
National Science Foundation				●												
Nuclear Regulatory Commission					●											
Smithsonian Institution									●							
Social Security Administration															●	
Tennessee Valley Authority					●											

KEY: ● = R&D function funded by specified agency.

SOURCE: Agencies' submission to Office of Management and Budget, Circular No. A-11, Max Schedule C, "Research and Development Activities;" agency budget justification documents; and supplemental data from the agencies' budget offices.

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FEDERAL R&D BUDGET AUTHORITY BY BUDGET FUNCTION

Table 1. **Federal R&D and R&D plant budget authority, by budget function: fiscal years 2001–03**

2003 rank	Budget function	2001 actual	2002 preliminary	2003 proposed	Percent change	
		[In millions of dollars]			2001–02	2002–03
	Total	91,505	103,104	112,000	12.7	8.6
1	National defense	46,202	53,478	58,774	15.7	9.9
2	Health	21,023	24,123	27,502	14.7	14.0
3	Space research and technology	8,951	9,297	9,839	3.9	5.8
4	General science	6,353	6,574	6,710	3.5	2.1
5	Natural resources and environment	2,138	2,211	2,181	3.4	-1.4
6	Agriculture	1,826	2,013	1,824	10.2	-9.4
7	Transportation	1,654	1,713	1,573	3.5	-8.2
8	Energy	1,320	1,565	1,415	18.5	-9.6
9	Veterans benefits and services	719	761	810	5.9	6.5
10	Education, training, employment, and social services	424	432	501	1.9	16.0
11	Commerce and housing credit	468	484	494	3.4	2.1
12	International affairs	252	268	182	6.3	-32.1
13	Administration of justice	88	98	114	11.4	16.3
14	Community & regional development	54	48	48	-11.1	0.0
15	Income security	30	37	30	23.3	-18.9
16	General government	3	3	3	0.0	0.0

NOTES: Because of rounding, components may not add to the totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from the agencies' budget offices.

Table 2. **Federal R&D budget authority, by budget function: fiscal years 2001–03**

2003 rank	Budget function	2001 actual	2002 preliminary	2003 proposed	Percent change	
		[In millions of dollars]			2001–02	2002–03
	Total	86,756	98,029	107,057	13.0	9.2
1	National defense	45,713	52,922	58,259	15.8	10.1
2	Health	20,758	23,654	26,615	13.9	12.5
3	Space research and technology	6,126	6,556	7,435	7.0	13.4
4	General science	5,468	5,717	5,890	4.6	3.0
5	Natural resources and environment	2,096	2,159	2,136	3.0	-1.1
6	Agriculture	1,657	1,703	1,703	2.8	0.0
7	Transportation	1,640	1,696	1,554	3.4	-8.4
8	Energy	1,314	1,547	1,408	17.7	-9.0
9	Veterans benefits and services	719	761	810	5.9	6.5
10	Education, training, employment, and social services	411	417	484	1.5	16.1
11	Commerce and housing credit	429	444	387	3.5	-12.8
12	International affairs	252	268	182	6.3	-32.1
13	Administration of justice	88	98	114	11.4	16.3
14	Community & regional development	54	48	48	-11.1	0.0
15	Income security	30	37	30	23.3	-18.9
16	General government	3	3	3	0.0	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 3. **Distribution of total Federal R&D budget authority, by budget function: fiscal years 2001–03**

2003 rank	Budget function	2001 actual	2002 preliminary	2003 proposed
		[in percentages]		
	Total	100.0	100.0	100.0
1	National defense	52.7	54.0	54.4
2	Health	23.9	24.1	24.9
3	Space research and technology	7.1	6.7	6.9
4	General science	6.3	5.8	5.5
5	Natural resources and environment	2.4	2.2	2.0
6	Agriculture	1.9	1.7	1.6
7	Transportation	1.9	1.7	1.5
8	Energy	1.5	1.6	1.3
9	Veterans benefits and services	0.8	0.8	0.8
10	Education, training, employment, and social services	0.5	0.4	0.5
11	Commerce and housing credit	0.5	0.5	0.4
12	International affairs	0.3	0.3	0.2
13	Administration of justice	0.1	0.1	0.1
14	Community & regional development	0.1	*	*
15	Income security	*	*	*
16	General government	*	*	*

NOTE: Because of rounding, components may not add to totals.

KEY: * = Less than one-twentieth of one percent.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 4. **Federally funded R&D for national defense and civilian functions: fiscal years 1955–2003**

Fiscal year	Current dollars			Constant 1996 dollars[1]			Percent of total	
	Total	National defense	Civilian functions	Total	National defense	Civilian functions	National defense	Civilian functions
	[In millions of dollars]							
1955	2,533	2,151	382	12,910	10,963	1,947	84.9	15.1
1956	2,988	2,535	453	14,836	12,587	2,249	84.8	15.2
1957	3,932	3,327	605	18,822	15,926	2,896	84.6	15.4
1958	4,570	3,801	769	21,236	17,663	3,573	83.2	16.8
1959	6,694	5,556	1,138	30,608	25,405	5,203	83.0	17.0
1960	7,552	6,107	1,445	34,141	27,608	6,533	80.9	19.1
1961	9,059	7,005	2,054	40,388	31,230	9,157	77.3	22.7
1962	10,290	7,238	3,052	45,370	31,914	13,457	70.3	29.7
1963	12,495	7,764	4,731	54,373	33,786	20,587	62.1	37.9
1964	14,225	7,829	6,396	61,183	33,673	27,510	55.0	45.0
1965	14,614	7,342	7,272	61,767	31,031	30,735	50.2	49.8
1966	15,320	7,536	7,784	63,384	31,179	32,205	49.2	50.8
1967	16,529	8,566	7,963	66,275	34,346	31,929	51.8	48.2
1968	15,921	8,275	7,646	61,614	32,024	29,590	52.0	48.0
1969	15,641	8,356	7,285	57,908	30,937	26,971	53.4	46.6
1970	15,339	7,981	7,358	53,840	28,013	25,827	52.0	48.0
1971	15,543	8,110	7,433	51,949	27,106	24,843	52.2	47.8
1972	16,496	8,902	7,594	52,669	28,423	24,246	54.0	46.0
1973	16,800	9,002	7,798	51,360	27,521	23,840	53.6	46.4
1974	17,410	9,016	8,394	49,686	25,731	23,955	51.8	48.2
1975	19,039	9,679	9,360	49,235	25,030	24,205	50.8	49.2
1976	20,780	10,430	10,350	50,193	25,193	25,000	50.2	49.8
1977	23,450	11,864	11,586	52,685	26,655	26,030	50.6	49.4
1978	25,976	12,899	13,077	54,617	27,122	27,496	49.7	50.3
1979	28,208	13,791	14,417	54,858	26,820	28,038	48.9	51.1
1980	29,739	14,946	14,793	53,115	26,694	26,421	50.3	49.7
1981	33,735	18,413	15,322	54,925	29,979	24,946	54.6	45.4
1982	36,115	22,070	14,045	54,953	33,582	21,371	61.1	38.9
1983	38,768	24,936	13,832	56,505	36,345	20,160	64.3	35.7
1984	44,214	29,287	14,927	62,151	41,168	20,983	66.2	33.8
1985	49,887	33,698	16,189	67,883	45,854	22,029	67.5	32.5
1986	53,249	36,926	16,323	70,753	49,065	21,689	69.3	30.7
1987	57,069	39,152	17,917	73,799	50,630	23,170	68.6	31.4
1988	59,106	40,099	19,007	74,012	50,212	23,800	67.8	32.2
1989	62,115	40,665	21,450	74,901	49,035	25,865	65.5	34.5

See explanatory notes and SOURCES at end of table.

Table 4. **Federally funded R&D for national defense and civilian functions: fiscal years 1955–2003**

Fiscal year	Current dollars			Constant 1996 dollars[1]			Percent of total	
	Total	National defense	Civilian functions	Total	National defense	Civilian functions	National defense	Civilian functions
	[In millions of dollars]							
1990	63,781	39,925	23,856	74,121	46,397	27,723	62.6	37.4
1991	65,898	39,328	26,570	73,711	43,991	29,720	59.7	40.3
1992	68,398	40,083	28,315	74,556	43,692	30,864	58.6	41.4
1993	69,884	41,249	28,635	74,400	43,915	30,485	59.0	41.0
1994	68,331	37,764	30,566	71,207	39,354	31,853	55.3	44.7
1995	68,791	37,204	31,587	70,166	37,948	32,219	54.1	45.9
1996	69,049	37,801	31,248	69,049	37,801	31,248	54.7	45.3
1997	71,653	39,591	32,062	70,283	38,834	31,449	55.3	44.7
1998	73,569	39,823	33,746	71,157	38,517	32,639	54.1	45.9
1999	77,637	41,306	36,332	74,124	39,436	34,687	53.2	46.8
2000	78,664	42,580	36,084	73,586	39,832	33,755	54.1	45.9
2001	86,756	45,713	41,043	79,323	41,796	37,527	52.7	47.3
2002	98,029	52,922	45,107	87,706	47,349	40,357	54.0	46.0
2003	107,057	58,259	48,798	94,091	51,203	42,888	54.4	45.6

[1] Calculated using fiscal year GDP implicit price deflators with 1996 as the base year.

NOTES: The national defense function includes Department of Defense's military activities and Department of Energy's atomic energy defense program. Civilian functions include all other Federally funded R&D activities. Data for 1955–77 are obligations. Data for 1978–2001 are actual budget authority. Data for 2002 are preliminary estimates of budget authority. Data for 2003 are budget authority proposed by the administration.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from the agencies' budget offices.

Table 5. **Federal budget authority for basic research, by budget function: fiscal years 2001–03**

2003 rank	Budget function	2001 actual	2002 preliminary	2003 proposed	Percent change	
		[In millions of dollars]			2001–02	2002–03
	Total	21,376	23,635	25,499	10.6	7.9
4	National defense	1,303	1,392	1,383	6.9	-0.7
1	Health	11,642	13,193	14,379	13.3	9.0
3	Space research and technology	1,695	1,967	2,361	16.0	20.1
2	General science	5,187	5,398	5,649	4.1	4.6
7	Natural resources and environment	215	220	208	2.0	-5.1
5	Agriculture	749	808	831	7.9	2.8
12	Transportation	17	13	25	-23.7	92.6
10	Energy	40	68	57	71.2	-15.7
6	Veterans benefits and services	289	329	351	13.7	6.9
8	Education, training, employment, and social services	112	115	117	2.7	1.7
9	Commerce and housing credit	50	52	73	4.0	40.4
11	International affairs	50	53	39	6.0	-26.4
13	Administration of justice	27	27	25	0.0	-7.4
--	Community & regional development	0	0	0	NA	NA
--	Income security	0	0	0	NA	NA
--	General government	0	0	0	NA	NA

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data. The order of budget functions is the same as order for Federal R&D budget authority, by budget function shown in table 2.

KEY: NA = Not applicable

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 6. **Federal R&D budget authority as a percentage of total budget authority by budget function: fiscal years 2001–03**

2003 rank	Budget function	2001 actual	2002 preliminary	2003 proposed
	All functions conducting R&D	7.5	7.9	8.0
4	National defense	13.9	15.1	14.7
5	Health	11.4	11.6	11.4
3	Space research and technology	45.6	46.6	52.1
2	General science	70.9	70.6	70.2
7	Natural resources and environment	7.0	7.0	7.1
6	Agriculture	5.7	5.9	7.2
9	Transportation	2.4	2.6	2.4
1	Energy[1]	782.1	252.8	271.8
10	Veterans benefits and services	1.5	1.5	1.4
12	Education, training, employment, and social services	0.6	0.5	0.6
8	Commerce and housing credit	3.5	4.2	2.7
11	International affairs	1.4	1.2	0.8
14	Administration of justice	0.2	0.3	0.3
13	Community & regional development	0.4	0.3	0.3
16	Income security	*	*	*
15	General government	*	*	*

[1] R&D as percentage of total budget authority is greater than 100 percent because gross budget authority has been reduced by offsetting receipts.

NOTES: Total budget authority includes discretionary and mandatory budget authority, less offsets. The order of budget functions is the same as order for Federal R&D budget authority, by budget function shown in table 2.

KEY: * = Less than one-fiftieth of 1 percent.

SOURCES: Agencies' submissions to Office of Management and Budget (OMB), MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

R&D BY SPECIFIC BUDGET FUNCTION

Table 7. **Federal R&D budget authority for national defense (050): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	45,713	52,922	58,259	10.1
Department of Defense—military (051)	42,719	49,629	54,805	10.4
Research, development, test, and evaluation (RDT&E)	41,735	48,554	54,070	11.4
Department of the Army	6,310	7,138	7,131	-0.1
Department of the Navy	9,583	11,375	12,502	9.9
Department of the Air Force	14,331	14,514	17,601	21.3
Defense agencies	11,286	15,297	16,614	8.6
Ballistic Missile Defense Organization	4,208	6,969	6,691	-4.0
Defense Advanced Research Projects Agency	1,977	2,253	2,685	19.2
Other defense agencies	5,101	6,075	7,238	19.1
Developmental test and evaluation[1]	0	0	0	NA
Operational test and evaluation[1]	225	230	222	-3.5
Other military funding[2]	984	1,075	735	-31.6
Department of Energy—atomic energy defense activities (053)	2,994	3,293	3,453	4.9
Weapons activities[3]	2,045	2,339	2,491	6.5
Naval reactors development[3]	608	605	621	2.7
Environmental restoration and waste management[4]	100	102	92	-9.6
Intelligence	6	6	6	0.0
Nonproliferation[3]	184	201	214	6.5
Nuclear safeguards and security	22	24	20	-17.5
Fissile materials disposition[3]	29	16	9	-41.3

[1] Between FY 2000 and FY 2001, the Department of Defense (DoD) combined the developmental test and evaluation account with the operational test and evaluation account.

[2] This item includes appropriate personnel costs in direct support of conduct of R&D, other appropriations funding certain DoD programs, and medical research funded outside RDT&E accounts.

[3] These accounts are now part of the National Nuclear Security Administration (NNSA) within the Department of Energy (DOE).

[4] Some environmental management programs shift to general science (250) in FY 2003 (see table 12). FY 2001 and FY 2002 figures adjusted for comparability.

KEY: NA = Not applicable

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: DoD and DOE submissions to Office of Management and Budget (OMB), MAX Schedule C; DoD's "RDT&E Programs (R-1)."

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Table 8. **Total obligational authority for Department of Defense research, development, test, and evaluation (RDT&E) budget: fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
		[In millions of dollars]		
Total RDT&E (budget authority)	41,735	48,554	54,070	11.4
Total RDT&E (TOA)[1]	41,748	48,505	54,070	11.5
Basic research	1,287	1,376	1,365	-0.8
Department of the Army	205	232	237	2.4
Department of the Navy	385	405	410	1.3
Department of the Air Force	207	226	219	-3.2
Defense agencies	490	513	499	-2.8
Applied research	3,674	4,086	3,780	-7.5
Department of the Army	815	910	642	-29.4
Department of the Navy	636	777	580	-25.3
Department of the Air Force	663	768	698	-9.2
Defense agencies	1,559	1,632	1,860	14.0
Advanced technology development	3,972	4,407	4,739	7.5
Department of the Army	811	910	943	3.6
Department of the Navy	791	870	617	-29.1
Department of the Air Force	564	572	743	29.8
Defense agencies	1,806	2,055	2,435	18.5
Demonstration and validation	8,052	10,361	10,539	1.7
Department of the Army	898	878	781	-11.1
Department of the Navy	2,633	2,578	2,432	-5.6
Department of the Air Force	1,295	960	1,458	51.8
Defense agencies	3,227	5,945	5,868	-1.3
Engineering and manufacturing development	8,441	11,018	13,550	23.0
Department of the Army	1,784	2,201	2,802	27.3
Department of the Navy	2,146	3,737	5,093	36.3
Department of the Air Force	3,355	3,606	4,320	19.8
Defense agencies	1,155	1,474	1,336	-9.3
Management support	3,342	2,858	2,896	1.3
Department of the Army	891	795	806	1.4
Department of the Navy	815	681	688	1.0
Department of the Air Force	817	652	629	-3.6
Defense agencies	558	499	551	10.5
Developmental test and evaluation[2]	35	0	0	NA
Operational test and evaluation[2]	225	230	222	-3.6

See explanatory information and SOURCE at end of table.

Table 8. **Total obligational authority for Department of Defense research, development, test, and evaluation (RDT&E) budget: fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Operational systems development	12,980	14,399	17,200	19.5
Department of the Army	859	1,126	920	-18.3
Department of the Navy	2,189	2,343	2,681	14.4
Department of the Air Force	7,412	7,762	9,536	22.8
Defense agencies	2,520	3,167	4,064	28.3
Adjustment for RDT&E budget authority[1]	-13	49	0	-100.0

[1] Detailed budget information on DoD's RDT&E activities is available only in total obligational authority (TOA), which is the sum of new budget authority, unobligated budget authority from previous years, and other authorized credits. Adjustment converts TOA to budget authority by subtracting unobligated budget authority from previous years and other authorized credits from TOA.

[2] Between FY 2000 and FY 2001, the Department of Defense (DoD) combined the developmental test and evaluation (DT&E) account with the operational test and evaluation (OT&E) account. The $35 million reported for FY 2001 for DoD's DT&E program is obligational authority derived from budget authority appropriated when DT&E and OT&E were separate programs.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

KEY: NA = Not applicable

SOURCES: Data from DoD, "RDT&E Programs (R-1)." Total RDT&E budget authority data from Budget of the United States Government FY 2003.

Table 9. **Federal R&D budget authority for health (550): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	20,758	23,654	26,615	12.5
Health care services and health research and training (551, 552)	20,616	23,494	26,455	12.6
Department of Health and Human Services (DHHS):				
National Institutes of Health	19,561	22,346	25,578	14.5
Centers for Disease Control	544	601	548	-8.9
Agency for Healthcare Research and Quality[1]	291	311	263	-15.4
Centers for Medicare and Medicaid Services[2]	138	117	28	-76.1
Health Resources and Services Administration	36	53	21	-60.4
Departmental Management	46	65	17	-73.8
Consumer and occupational health and safety (554)	142	160	160	0.0
Food and Drug Administration (DHHS)	136	154	155	0.6
Occupational Safety and Health Administration (Department of Labor)	6	6	5	-16.7

[1] Formerly the Agency for Health Care Policy and Research, until name changed in FY 2000 under the Healthcare Research and Quality Act of 1999.

[2] Formerly the Health Care Financing Administration.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from the agencies' budget offices.

Table 10. **Federal R&D budget authority for the National Institutes of Health (NIH): fiscal years 2001–03**

Agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	19,561	22,346	25,578	14.5
National Cancer Institute	3,691	4,117	5,016	21.8
National Institute of Allergy and Infectious Diseases	1,998	2,494	3,744	50.1
National Heart, Lung, and Blood Institute	2,222	2,490	2,649	6.4
National Institute of General Medical Sciences	1,379	1,556	1,667	7.1
National Institute of Diabetes and Digestive and Kidney Diseases	1,357	1,514	1,620	7.0
National Institute of Neurological Disorders and Stroke	1,150	1,300	1,384	6.5
National Institute of Mental Health	1,054	1,191	1,267	6.4
National Institute of Child Health and Human Development	946	1,080	1,153	6.8
National Center for Research Resources	738	897	990	10.3
National Institute on Drug Abuse	773	870	927	6.5
National Institute on Aging	765	871	927	6.4
National Institute of Environmental Health Sciences[1]	632	611	651	6.6
National Eye Institute	500	570	606	6.4
National Institute of Arthritis and Musculoskeletal and Skin Diseases	385	436	464	6.3
National Human Genome Research Institute	379	424	451	6.1
National Institute on Alcohol Abuse and Alcoholism	331	374	398	6.4
National Institute of Dental and Cranofacial Research	296	331	352	6.4
National Institute on Deafness and Other Communication Disorders	283	321	341	6.3
Office of the Director	200	221	234	5.9
National Center for Minority Health and Health Disparities	123	150	170	13.3
National Library of Medicine	127	149	164	10.0
National Institute of Biomedical Imaging and Bioengineering[2]	0	111	118	6.0
National Institute of Nursing Research	96	110	117	6.1
National Center for Complementary and Alternative Medicine	87	102	108	6.0
John E. Fogarty International Center	50	57	62	9.8

[1] Includes funding from Superfund-related transfers and appropriations.

[2] The National Institute for Biomedical Imaging and Bioengineering (NIBIB) is the newest of the research institutes at NIH. NIBIB is authorized by law (P.L. 106-580) which was signed by President William Clinton on December 29, 2000.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data. Excludes non-R&D and R&D facilities components of institute budgets.

Table 11. **Federal R&D and R&D plant budget authority for space research and technology (252): fiscal years 2001–03**

Funding category	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars for R&D and R&D plant]			
Total	8,951	9,297	9,839	5.8
National Aeronautics and Space Administration (NASA):				
Space Station[1]	2,128	1,722	1,492	-13.3
Other human space flight	734	532	390	-26.6
Space science	2,618	2,880	3,428	19.0
Biological and physical research[2]	365	828	851	2.8
Earth science	1,771	1,636	1,639	0.2
Advanced space transportation	1,149	1,445	1,872	29.5
Commercial technology	162	164	147	-10.3
Academic programs	133	227	144	-36.8
Adjustments[3]	-109	-136	-125	-8.6
	[In millions of dollars for R&D]			
Total	6,126	6,556	7,435	13.4
National Aeronautics and Space Administration:				
Space Station[1]	0	0	0	NA
Other human space flight	317	191	68	-64.6
Space science	2,363	2,602	3,202	23.1
Biological and physical research[2]	354	447	501	12.2
Earth science	1,766	1,636	1,636	0.0
Advanced space transportation	1,139	1,425	1,862	30.6
Commercial technology	162	164	147	-10.3
Academic programs	133	227	144	-36.8
Adjustments[3]	-109	-136	-125	-8.6

[1] In FY 2000, NASA reclassified Space Station as a physical asset and Space Station research as equipment and transferred funding for the Space Station program from R&D to R&D plant.

[2] In FY 2002, NASA transferred R&D plant funds in the Space Station research budget to the biological and physical research enterprise (which also now includes some R&D plant funds), as required by both the Authorization Act (PL 106-391) and the 2002 Appropriations Act (HR 2620).

[3] Subtracts non-R&D costs from total budget authority.

NOTES: Includes funds for research and research program management. Total R&D excludes fixed capital equipment costs. Because of rounding, components may not add to totals. Percent change derived from unrounded data.

KEY: NA = Not applicable

SOURCES: National Aeronautics and Space Administration's (NASA's) submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from the NASA budget and the NASA budget office.

Table 12. **Federal R&D budget authority for general science and basic research (251): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	5,468	5,717	5,890	3.0
National Science Foundation	3,032	3,250	3,404	4.7
Mathematical and physical sciences	854	920	942	2.3
Geosciences	564	609	691	13.4
Biological sciences	486	508	526	3.4
Engineering	433	472	488	3.3
Computer and information science and engineering	478	515	527	2.3
U.S. polar research programs	282	298	304	2.0
Social, behavioral, and economic sciences	177	169	196	15.9
Education and human resources	785	875	908	3.8
Integrative activities	98	107	111	3.8
Budget authority adjustment[1]	-1,125	-1,224	-1,288	NA
Department of Energy	2,435	2,467	2,486	0.8
High energy physics	559	588	590	0.4
Nuclear physics	308	317	340	7.3
Fusion energy sciences	231	241	241	-0.2
Basic energy sciences	629	634	670	5.7
Advanced scientific computing research	156	151	162	7.3
Energy research analyses	0	0	0	NA
Small business innovation research[2]	93	0	0	NA
Biological and environmental research[3]	459	536	482	-9.9
Human genome	85	88	90	2.6
All other research	373	448	392	-12.4

[1] Budget authority adjustment subtracts costs for research facilities, major equipment support, and other non-R&D costs.

[2] Department of Energy treats this activity as a budget execution program (i.e., funds are collected from existing appropriations and are not allocated until three quarters through the fiscal year).

[3] Some Environmental Management programs (050) shift to general science in FY 2003 (see table 7). FY 2001 and FY 2002 figures adjusted for comparability.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data. Not all federally sponsored basic research is categorized in this subfunction 251.

KEY: NA = Not applicable

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 13. **Federal R&D budget authority for natural resources and environment (300): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	2,096	2,159	2,136	-1.1
Pollution control and abatement (304)				
Environmental Protection Agency	574	592	627	5.9
Science and technology	531	545	514	-30.4
Superfund	36	38	111	72.8
Leaking underground storage tanks	1	1	1	0.0
Oil spill response research	1	1	1	0.0
Other accounts	4	7	0	-100.0
Conservation and land management (302)	388	373	358	-4.0
Forest Service (USDA)	340	306	279	-8.8
Department of the Interior[1]	48	67	79	17.9
Recreational resources (303)	161	166	164	-1.1
U.S. Geological Survey[2] (Interior)	161	166	164	-1.1
National Park Service[3] (Interior)	0	0	0	NA
Water resources (301)	34	37	34	-8.1
Army Corps of Engineers (DoD)	27	27	27	0.0
Bureau of Reclamation (Interior)	7	10	7	-30.0
Other natural resources (306)	940	991	952	-3.9
U.S. Geological Survey (Interior)	406	416	377	-9.4
Geologic and mineral resource surveys and mapping	225	233	221	-5.2
Water resources investigations	137	140	114	-18.5
National mapping, geography, and survey	43	44	43	-2.1
National Oceanic and Atmospheric Administration (Commerce)	534	574	575	0.1
Oceanic and atmospheric research	266	290	284	-2.0
Climate and air quality	72	74	73	-1.2
All other research	266	290	284	-2.0
National Marine Fisheries Service	126	122	122	0.0
National Ocean Service	62	61	55	-9.4
National Weather Service	23	28	28	0.0
National Environmental Satellite, Data, and Information Service	13	11	11	1.9
Program support	44	63	75	19.0

[1] Includes Bureau of Land Management, Office of Surface Mining and Reclamation, and Minerals Management Service.

[2] Natural resources research formerly funded by the National Biological Service.

[3] In previous years, the National Park Service (NPS) classified several of its programs as R&D. In the FY 2001 budget submission, NPS reclassified all of its activities as non-R&D.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 14. **Federal R&D budget authority for agriculture (350): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	1,657	1,703	1,703	0.0
Agricultural research and services (352):				
Department of Agriculture				
Agricultural Research Service	935	1,035	1,005	-2.9
Cooperative State Research, Education, and Extension Service	610	554	565	2.0
National Research Initiative	106	120	240	99.2
Payments under the Hatch Act	180	180	180	0.0
Special research grants	86	97	3	-96.6
Initiative for Future Agriculture and Food Systems[1]	68	0	0	NA
Other research programs	170	157	142	-9.6
Economic Research Service	71	73	85	16.4
Animal and Plant Health Inspection Service	23	25	29	16.0
National Agricultural Statistics Service	4	4	4	0.0
Agricultural Marketing Service	5	5	6	20.0
Federal Grain Inspection Service	5	6	7	16.7
Foreign Agricultural Service	1	1	2	100.0
Office of the Secretary[1]	3	0	0	NA

[1] Mandatory (non-appropriated) program.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

KEY: NA = Not applicable

SOURCES: United States Department of Agriculture's (USDA's) submission to Office of Management and Budget, MAX Schedule C; budget justification documents; and supplemental data obtained from USDA budget office.

Table 15. **Federal R&D budget authority for transportation (400): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	1,640	1,696	1,554	-8.4
Air transportation (402)	1,223	1,277	1,139	-10.9
National Aeronautics and Space Administration[1]	936	935	837	-10.5
Aeronautical research and technology	936	935	837	-10.5
Transatmospheric research and technology	0	0	0	NA
Federal Aviation Administration (DOT)	287	342	207	-39.5
Transportation Security Administration (DOT)[2]	0	0	95	NA
Ground transportation (DOT) (401)	374	376	366	-2.7
Federal Highway Administration	268	275	266	-3.5
National Highway Traffic Safety Administration	58	59	59	0.5
Federal Railroad Administration	27	31	30	-3.8
Federal Transit Administration	8	7	4	-40.0
Federal Motor Carrier Safety Administration	12	3	6	119.2
Water transportation (DOT) (403)	22	21	24	13.7
U.S. Coast Guard	22	21	24	13.7
Other transportation (DOT) (407)[3]	20	21	25	17.0

[1] Includes funds for research and research program management.

[2] New DOT agency created to operate civilian airport security; TSA will take over aviation security R&D funded by FAA in previous years. FY 2003 figures assume aviation security R&D will be funded at the FY 2002 level.

[3] Includes Office of the Secretary and the Research and Special Programs Administration.

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 16. **Federal R&D budget authority for energy (270): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	1,314	1,547	1,408	-9.0
Department of Energy	1,232	1,456	1,310	-10.0
Fossil energy (271)	350	490	414	-15.5
Clean coal technology	0	0	0	NA
Cooperative R&D	8	8	6	-27.2
Petroleum, coal, and gas program	342	482	408	-15.3
Energy supply (271)	368	442	419	-5.2
Nuclear energy	44	96	63	-34.3
Solar and renewables	323	346	356	2.9
Radioactive waste management (271)	44	60	64	5.7
Energy conservation (272)	470	464	413	-10.9
Tennessee Valley Authority (271)	29	30	30	0.0
Nuclear Regulatory Commission (276)	53	61	68	11.5

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

KEY: NA = Not applicable

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; Department of Energy's budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 17. **Federal R&D budget authority for veterans benefits and services (700): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	719	761	810	6.5
Department of Veterans Affairs Medical and prosthetic research (703)	719	761	810	6.5

NOTE: Includes administrative and operating expenses related to agency's research.

SOURCES: Departmental submission to Office of Management and Budget, MAX Schedule C.

Table 18. **Federal R&D budget authority for education, training, employment, and social services (500): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	411	417	484	16.1
Research and general education aids (501, 502, 503)	272	270	316	17.0
Department of Education programs	164	159	202	27.0
Smithsonian Institution programs	108	111	114	2.7
Social services (506)	128	133	163	22.6
Administration for Children and Families (DHHS)	24	24	54	125.0
Administration on Aging (DHHS)	4	0	0	NA
Rehabilitation services (Education)	100	109	109	0.0
Training and employment (504) (Labor's Employment and Training Admin.)	11	14	5	-64.3

NOTES: Because of rounding, components may not add to totals. Percent change derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 19. **Federal R&D budget authority for commerce and housing credit (370): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	429	444	387	-12.8
Other advancement of commerce (376)				
Department of Commerce				
National Institute of Standards and Technology	375	421	377	-10.4
Electronics and electrical engineering	39	41	44	6.9
Manufacturing engineering	20	20	22	6.9
Chemical science and technology	33	34	40	15.0
Physics	30	31	36	16.9
Materials science	54	56	67	18.7
Building and fire research	17	20	19	-4.3
Computer science and applied math	49	54	54	0.5
Technology assistance	4	4	4	6.9
Research support activities	1	2	10	390.7
Critical infrastructure protection	5	0	0	NA
Industrial technology services				
Advanced Technology Program	123	158	81	-48.7
Bureau of the Census	2	2	3	50.0
National Telecommunications and Information Administration	52	21	7	-66.7

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

KEY: NA = Not applicable

SOURCES: Departmental submission to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 20. **Federal R&D budget authority for the Agency for International Development (AID) and other international programs (150): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total (150)	252	268	182	-32.1
Agency for International Development (151)	224	243	157	-35.4
International Security Assistance (152)	28	25	25	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agency submission to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

Table 21. **Federal R&D budget authority for administration of justice (750): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	88	98	114	16.3
Department of Justice	88	98	114	16.3
Office of Justice Programs (754)	69	64	77	20.3
Federal Bureau of Investigation (751)	5	25	28	12.0
Federal Prison System (753)	14	9	9	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 22. **Federal R&D budget authority for community and regional development (450): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	54	48	48	0.0
Department of Housing and Urban Development (451)	53	47	47	0.0
Department of Commerce				
Economic Development Administration (452)	1	1	1	0.0

NOTES: Because of rounding, components may not add to totals. Percent change is derived from unrounded data.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agencies' budget offices.

Table 23. **Federal R&D budget authority for income security (600): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	30	37	30	-18.9
Social Security Administration[1]	30	37	30	-18.9

[1] Actual functional code is 650, Social Security.

NOTE: Percent change is derived from unrounded data.

SOURCES: Agency submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

Table 24. **Federal R&D budget authority for general government (800): fiscal years 2001–03**

Funding category and agency	2001 actual	2002 preliminary	2003 proposed	Percent change 2002–03
	[In millions of dollars]			
Total	3	3	3	0.0
Department of the Treasury				
Engraving and Printing (803)	3	3	3	0.0

NOTE: Percent change is derived from unrounded data.

SOURCES: Agency submissions to Office of Management and Budget, MAX Schedule C; and supplemental data obtained from agency budget office.

HISTORICAL TABLES

Table 25a. **Federal R&D obligations, by selected budget function: fiscal years 1955–60**

Budget function	1955	1956	1957	1958	1959	1960
	[In millions of dollars]					
Total	2,533	2,988	3,932	4,570	6,694	7,522
National defense	2,151	2,535	3,327	3,801	5,556	6,107
Health	67	83	140	177	233	305
All other functions	315	370	465	592	904	1,140
	[In millions of constant FY 1996 dollars]					
Total	12,910	14,836	18,822	21,236	30,608	34,005
National defense	10,963	12,587	15,926	17,663	25,405	27,608
Health	341	412	670	822	1,065	1,379
All other functions	1,606	1,837	2,226	2,751	4,134	5,154

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices.

Table 25b. **Federal R&D obligations, by selected budget function: fiscal years 1961–66**

Budget function	1961	1962	1963	1964	1965	1966
	[In millions of dollars]					
Total	9,059	10,290	12,495	14,225	14,614	15,320
National defense	7,005	7,238	7,764	7,829	7,342	7,536
Health	405	551	626	728	792	900
Space research and technology	777	1,413	2,812	4,241	4,887	4,976
Energy	373	448	515	571	585	575
General science	137	187	246	277	304	377
Natural resources and environment	73	108	120	134	159	189
Transportation	55	101	142	122	147	251
Agriculture	125	136	146	165	195	201
All other functions	108	107	125	160	203	315
	[In millions of constant FY 1996 dollars]					
Total	40,388	45,370	54,373	61,183	61,767	63,384
National defense	31,230	31,914	33,786	33,673	31,031	31,179
Health	1,806	2,429	2,724	3,131	3,347	3,724
Space research and technology	3,464	6,230	12,237	18,241	20,655	20,588
Energy	1,663	1,975	2,241	2,456	2,473	2,379
General science	611	825	1,070	1,191	1,285	1,560
Natural resources and environment	325	476	522	576	672	782
Transportation	245	445	618	525	621	1,038
Agriculture	557	600	635	710	824	832
All other functions	481	472	544	688	858	1,303

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities;" and supplemental data obtained from agencies' budget offices.

Table 25c. **Federal R&D obligations, by budget function: fiscal years 1967–72**

Budget function	1967	1968	1969	1970	1971	1972
	[In millions of dollars]					
Total	16,529	15,921	15,641	15,339	15,543	16,496
National defense	8,566	8,275	8,356	7,981	8,110	8,902
Health	915	1,021	1,088	1,084	1,288	1,547
Space research and technology	4,778	4,304	3,799	3,606	3,048	2,932
Energy	600	657	597	574	556	574
General science	409	437	433	452	513	625
Natural resources and environment	320	331	323	340	416	479
Transportation	380	304	404	535	728	558
Agriculture	218	217	221	238	259	294
Education, training, employment, and social services	154	166	169	164	215	235
International affairs	18	17	26	32	32	29
Veterans benefits and services	41	45	50	59	63	69
Commerce and housing credit	43	48	54	79	90	50
Community and regional development	37	44	32	47	65	66
Administration of justice	*	1	5	9	10	23
Income security	48	50	78	136	145	106
General government	3	5	5	6	7	8
	[In millions of constant FY 1996 dollars]					
Total	66,275	61,614	57,908	53,840	51,949	52,669
National defense	34,346	32,024	30,937	28,013	27,106	28,423
Health	3,669	3,951	4,028	3,805	4,305	4,939
Space research and technology	19,158	16,656	14,065	12,657	10,187	9,361
Energy	2,406	2,543	2,210	2,015	1,858	1,833
General science	1,640	1,691	1,603	1,587	1,715	1,996
Natural resources and environment	1,283	1,281	1,196	1,193	1,390	1,529
Transportation	1,524	1,176	1,496	1,878	2,433	1,782
Agriculture	874	840	818	835	866	939
Education, training, employment, and social services	617	642	626	576	719	750
International affairs	72	66	96	112	107	93
Veterans benefits and services	164	174	185	207	211	220
Commerce and housing credit	172	186	200	277	301	160
Community and regional development	148	170	118	165	217	211
Administration of justice	*	4	19	32	33	73
Income security	192	193	289	477	485	338
General government	12	19	19	21	23	26

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

KEY: * = Less than $500,000.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices.

Table 25d. **Federal R&D obligations, by budget function: fiscal years 1973–77**

Budget function	1973	1974	1975	1976	1977
	[In millions of dollars]				
Total	16,800	17,410	19,039	20,780	23,450
National defense	9,002	9,016	9,679	10,430	11,864
Health	1,585	2,069	2,170	2,351	2,629
Space research and technology	2,824	2,702	2,764	3,130	2,832
Energy	630	759	1,363	1,649	2,562
General science	658	749	813	858	974
Natural resources and environment	554	516	624	683	753
Transportation	572	693	635	631	708
Agriculture	308	313	342	383	457
Education, training, employment, and social services	290	236	239	255	230
International affairs	28	24	29	42	66
Veterans benefits and services	74	85	95	98	107
Commerce and housing credit	50	51	65	69	71
Community and regional development	78	82	93	109	101
Administration of justice	33	35	44	35	30
Income security	106	71	72	48	55
General government	7	9	12	12	13
	[In millions of constant FY 1996 dollars]				
Total	51,360	49,686	49,235	50,193	52,685
National defense	27,521	25,731	25,030	25,193	26,655
Health	4,846	5,905	5,612	5,679	5,907
Space research and technology	8,633	7,711	7,148	7,560	6,363
Energy	1,926	2,166	3,525	3,983	5,756
General science	2,012	2,138	2,102	2,072	2,188
Natural resources and environment	1,694	1,473	1,614	1,650	1,692
Transportation	1,749	1,978	1,642	1,524	1,591
Agriculture	942	893	884	925	1,027
Education, training, employment, and social services	887	674	618	616	517
International affairs	86	68	75	101	148
Veterans benefits and services	226	243	246	237	240
Commerce and housing credit	153	146	168	167	160
Community and regional development	238	234	240	263	227
Administration of justice	101	100	114	85	67
Income security	324	203	186	116	124
General government	21	26	31	29	29

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices.

Table 25e. **Federal R&D budget authority, by budget function: fiscal years 1978–83**

Budget function	1978	1979	1980	1981	1982	1983
	[In millions of dollars]					
Total	25,976	28,208	29,739	33,735	36,115	38,768
National defense	12,899	13,791	14,946	18,413	22,070	24,936
Health	2,968	3,401	3,694	3,871	3,869	4,298
Space research and technology	2,939	3,136	2,738	3,111	2,584	2,134
Energy	3,134	3,461	3,603	3,501	3,012	2,578
General science	1,050	1,119	1,233	1,340	1,359	1,502
Natural resources and environment	904	1,010	999	1,061	965	952
Transportation	768	798	887	869	791	876
Agriculture	501	552	585	659	693	745
Education, training, employment, and social services	345	354	468	298	228	189
International affairs	57	117	125	160	165	177
Veterans benefits and services	111	123	126	143	139	157
Commerce and housing credit	77	93	101	106	104	107
Community and regional development	92	127	119	104	63	44
Administration of justice	44	47	45	34	31	37
Income security	67	57	47	43	32	32
General government	20	23	22	22	10	6
	[In millions of constant FY 1996 dollars]					
Total	54,617	54,858	53,115	54,925	54,953	56,505
National defense	27,122	26,820	26,694	29,979	33,582	36,345
Health	6,241	6,614	6,598	6,303	5,887	6,264
Space research and technology	6,180	6,099	4,890	5,065	3,932	3,110
Energy	6,590	6,731	6,435	5,700	4,583	3,757
General science	2,208	2,176	2,202	2,182	2,068	2,189
Natural resources and environment	1,901	1,964	1,784	1,727	1,468	1,388
Transportation	1,615	1,552	1,584	1,415	1,204	1,277
Agriculture	1,053	1,074	1,045	1,073	1,054	1,086
Education, training, employment, and social services	725	688	836	485	347	275
International affairs	120	228	223	261	251	258
Veterans benefits and services	233	239	225	233	212	229
Commerce and housing credit	162	181	180	173	158	156
Community and regional development	193	247	213	169	96	64
Administration of justice	93	91	80	55	47	54
Income security	141	111	84	70	49	47
General government	42	45	39	36	15	9

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices.

Table 25f. **Federal R&D budget authority, by budget function: fiscal years 1984–89**

Budget function	1984	1985	1986	1987	1988	1989
	[In millions of dollars]					
Total	44,214	49,887	53,249	57,069	59,106	62,115
National defense	29,287	33,698	36,926	39,152	40,099	40,665
Health	4,779	5,418	5,565	6,556	7,076	7,773
Space research and technology	2,300	2,725	2,894	3,398	3,683	4,555
Energy	2,581	2,389	2,286	2,053	2,126	2,419
General science	1,676	1,862	1,873	2,042	2,160	2,373
Natural resources and environment	963	1,059	1,062	1,133	1,160	1,255
Transportation	1,040	1,030	917	908	896	1,064
Agriculture	762	836	815	822	882	907
Education, training, employment, and social services	200	220	248	267	285	347
International affairs	192	210	211	223	224	279
Veterans benefits and services	218	193	183	215	195	212
Commerce and housing credit	110	114	111	110	122	128
Community and regional development	46	50	88	99	108	74
Administration of justice	24	47	41	49	51	45
Income security	26	21	14	25	23	27
General government	8	17	14	17	17	15
	[In millions of constant FY 1996 dollars]					
Total	62,151	67,883	70,753	73,799	74,012	74,901
National defense	41,168	45,854	49,065	50,630	50,212	49,035
Health	6,718	7,372	7,394	8,478	8,861	9,373
Space research and technology	3,233	3,708	3,845	4,394	4,612	5,493
Energy	3,628	3,251	3,037	2,655	2,662	2,917
General science	2,356	2,534	2,469	2,641	2,705	2,861
Natural resources and environment	1,354	1,441	1,411	1,465	1,453	1,513
Transportation	1,462	1,402	1,218	1,174	1,122	1,283
Agriculture	1,071	1,138	1,083	1,063	1,104	1,094
Education, training, employment, and social services	281	299	330	345	357	418
International affairs	270	286	280	288	280	336
Veterans benefits and services	306	263	243	278	244	256
Commerce and housing credit	155	155	147	142	153	154
Community and regional development	65	68	117	128	135	89
Administration of justice	34	64	54	63	64	54
Income security	37	29	19	32	29	33
General government	11	23	19	22	21	18

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCE: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," and supplemental data obtained from agencies' budget offices.

Table 25g. **Federal R&D budget authority, by budget function: fiscal years 1990–95**

Budget function	1990	1991	1992	1993	1994	1995
	[In millions of dollars]					
Total	63,781	65,898	68,398	69,884	68,331	68,791
National defense	39,925	39,328	40,061	41,249	37,764	37,204
Health	8,308	9,226	10,055	10,280	10,993	11,407
Space research and technology	5,765	6,511	6,744	6,988	7,414	7,916
Energy	2,726	2,953	3,153	2,677	2,873	2,844
General science	2,410	2,635	2,659	2,691	2,712	2,794
Natural resources and environment	1,386	1,582	1,688	1,802	2,062	1,988
Transportation	1,045	1,231	1,523	1,703	1,888	1,833
Agriculture	950	1,052	1,155	1,152	1,193	1,194
Education, training, employment, and social services	374	433	365	348	373	369
International affairs	375	378	371	382	254	287
Veterans benefits and services	216	219	245	250	265	257
Commerce and housing credit	140	178	192	220	380	525
Community and regional development	67	88	95	57	68	70
Administration of justice	44	51	51	49	46	59
Income security	33	30	37	36	45	43
General government	17	4	4	*	0	1
	[In millions of constant FY 1996 dollars]					
Total	74,121	73,711	74,556	74,400	71,207	70,166
National defense	46,397	43,991	43,668	43,915	39,354	37,948
Health	9,655	10,320	10,960	10,944	11,456	11,635
Space research and technology	6,700	7,282	7,351	7,440	7,726	8,074
Energy	3,168	3,303	3,437	2,850	2,994	2,901
General science	2,801	2,947	2,898	2,864	2,826	2,849
Natural resources and environment	1,611	1,769	1,840	1,918	2,149	2,028
Transportation	1,214	1,377	1,660	1,813	1,968	1,870
Agriculture	1,104	1,177	1,259	1,226	1,244	1,218
Education, training, employment, and social services	435	484	398	371	389	376
International affairs	436	423	404	407	265	293
Veterans benefits and services	251	245	267	267	276	262
Commerce and housing credit	163	200	209	234	396	536
Community and regional development	78	99	104	61	70	71
Administration of justice	51	57	55	52	48	60
Income security	38	33	40	39	47	44
General government	20	4	4	*	0	1

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant FY 1996 dollars.

KEY: * = Less than $500,000.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 25h. **Federal R&D budget authority, by budget function: fiscal years 1996–2003**

Budget function	1996	1997	1998	1999	2000	2001	2002 preliminary	2003 proposed
	[In millions of dollars]							
Total	69,049	71,653	73,569	77,637	78,664	86,756	98,029	107,057
National defense	37,801	39,591	39,823	41,306	42,580	45,713	52,922	58,259
Health	11,867	12,670	13,576	15,553	17,869	20,758	23,054	26,615
Space research and technology[1]	7,844	7,844	8,198	8,245	5,363	6,126	6,556	7,435
Energy[2]	2,521	2,372	948	1,131	996	1,314	1,547	1,408
General science[2]	2,846	2,944	4,360	4,690	4,977	5,468	5,717	5,890
Natural resources and environment	1,802	1,886	1,855	1,842	1,999	2,096	2,159	2,136
Transportation	1,795	1,785	1,833	1,725	1,636	1,640	1,696	1,554
Agriculture	1,176	1,203	1,249	1,288	1,426	1,657	1,703	1,703
Education, training, employment, and social services	331	373	444	403	418	411	417	484
International affairs	252	190	163	190	200	252	268	182
Veterans benefits and services[3]	259	267	587	644	645	719	761	810
Commerce and housing credit	432	409	398	432	406	429	444	387
Community and regional development	50	48	42	59	46	54	48	48
Administration of justice	56	59	72	88	73	88	98	114
Income security	16	9	18	38	25	30	37	30
General government	2	2	2	3	6	3	3	3
	[In millions of constant FY 1996 dollars]							
Total	69,049	70,283	71,157	74,124	73,586	79,323	87,706	94,091
National defense	37,801	38,834	38,517	39,436	39,832	41,796	47,349	51,203
Health	11,867	12,428	13,131	14,849	16,715	18,980	21,163	23,392
Space research and technology[1]	7,844	7,694	7,929	7,872	5,017	5,601	5,865	6,534
Energy[2]	2,521	2,326	917	1,080	931	1,201	1,384	1,237
General science[2]	2,846	2,888	4,217	4,477	4,655	4,999	5,115	5,177
Natural resources and environment	1,802	1,850	1,794	1,758	1,870	1,916	1,932	1,877
Transportation	1,795	1,751	1,773	1,647	1,531	1,499	1,517	1,365
Agriculture	1,176	1,180	1,208	1,230	1,334	1,515	1,524	1,497
Education, training, employment, and social services	331	366	429	385	391	376	373	425
International affairs	252	186	158	181	187	230	240	160
Veterans benefits and services[3]	259	262	568	615	603	657	681	712
Commerce and housing credit	432	401	385	412	380	392	397	340

See explanatory notes and SOURCES at end of table.

Table 25h. **Federal R&D budget authority, by budget function: fiscal years 1996–03**

Budget function	1996	1997	1998	1999	2000	2001	2002 preliminary	2003 proposed
	[In millions of dollars]							
Community and regional development	50	47	41	56	43	49	43	42
Administration of justice	56	58	70	84	68	80	88	100
Income security	16	9	17	36	23	27	33	26
General government	2	2	2	3	6	3	3	3

[1] In FY 2000, NASA reclassified Space Station as a physical asset and Space Station research as equipment and transferred funding for the Space Station program from R&D to R&D plant (details on NASA data are shown in table 11).

[2] Beginning in FY 1998, a number of Department of Energy programs were reclassified from energy (270) to general science (251).

[3] Beginning in FY 1998, the Department of Veterans Affairs (VA) was required to report medical care support funds as part of VA's total research budgetary resources.

NOTES: Data for 1996–2001 are actual budget authority. Data for 2002 are preliminary estimates, and data for 2003 are proposed based on fiscal year 2003 budget. Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26a. **Federal budget authority for basic research, by budget function: fiscal years 1978–83**

Budget function	1978	1979	1980	1981	1982	1983
	[In millions of dollars]					
Total	3,665	4,108	4,716	5,107	5,305	6,247
National defense	320	365	552	610	696	788
Health	1,246	1,579	1,761	1,951	1,953	2,475
Space research and technology	412	440	482	445	434	501
Energy	157	172	200	220	260	320
General science	962	1,026	1,152	1,256	1,296	1,439
Natural resources and environment	207	131	136	131	139	156
Transportation	70	75	79	89	102	117
Agriculture	197	222	246	281	295	326
Education, training, employment, and social services	57	59	61	66	78	70
International affairs	*	0	0	12	10	10
Veterans benefits and services	9	10	14	15	13	14
Commerce and housing credit	9	10	15	17	17	19
Community and regional development	8	8	8	5	7	6
Administration of justice	10	10	9	5	4	4
Income security	2	1	1	3	0	0
General government	0	*	*	3	2	3
	[In millions of constant FY 1996 dollars]					
Total	7,706	7,989	8,423	8,315	8,072	9,105
National defense	673	710	986	993	1,059	1,149
Health	2,620	3,071	3,145	3,176	2,972	3,607
Space research and technology	866	856	861	725	660	730
Energy	330	335	357	358	396	466
General science	2,023	1,995	2,058	2,045	1,972	2,097
Natural resources and environment	435	255	243	213	212	227
Transportation	147	146	141	145	155	171
Agriculture	414	432	439	458	449	475
Education, training, employment, and social services	120	115	109	107	119	102
International affairs	*	0	0	20	15	15
Veterans benefits and services	19	19	25	24	20	20
Commerce and housing credit	19	19	27	28	26	28
Community and regional development	17	16	14	8	11	9
Administration of justice	21	19	16	8	6	6
Income security	4	2	2	5	0	0
General government	0	*	*	5	3	4

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

KEY: * = Less than $500,000.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities," agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26b. **Federal budget authority for basic research, by budget function: fiscal years 1984–89**

Budget function	1984	1985	1986	1987	1988	1989
	[In millions of dollars]					
Total	7,072	7,810	8,193	9,021	9,553	10,648
National defense	845	856	960	900	905	965
Health	2,813	3,243	3,324	3,851	4,087	4,413
Space research and technology	646	498	737	843	944	1,099
Energy	365	428	456	511	571	703
General science	1,606	1,779	1,795	1,942	2,061	2,265
Natural resources and environment	192	206	204	206	210	331
Transportation	125	255	184	231	197	287
Agriculture	353	406	390	397	428	433
Education, training, employment, and social services	77	86	83	78	83	92
International affairs	3	4	5	3	3	3
Veterans benefits and services	15	15	15	17	17	16
Commerce and housing credit	20	23	26	26	28	29
Community and regional development	5	6	6	4	7	3
Administration of justice	5	4	5	8	8	7
Income security	0	0	0	0	0	0
General government	3	4	5	4	5	3
	[In millions of constant FY 1996 dollars]					
Total	9,941	10,627	10,886	11,666	11,962	12,840
National defense	1,188	1,165	1,276	1,164	1,133	1,164
Health	3,954	4,413	4,417	4,980	5,118	5,321
Space research and technology	908	678	979	1,090	1,182	1,325
Energy	513	582	606	661	715	848
General science	2,258	2,421	2,385	2,511	2,581	2,731
Natural resources and environment	270	280	271	266	263	399
Transportation	176	347	244	299	247	346
Agriculture	496	552	518	513	536	522
Education, training, employment, and social services	108	117	110	101	104	111
International affairs	4	5	7	4	4	4
Veterans benefits and services	21	20	20	22	21	19
Commerce and housing credit	28	31	35	34	35	35
Community and regional development	7	8	8	5	9	4
Administration of justice	7	5	7	10	10	8
Income security	0	0	0	0	0	0
General government	4	5	7	5	6	4

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, Circular No. A-11, Exhibit 44A, "Research and Development Activities;" agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26c. **Federal budget authority for basic research, by budget function: fiscal years 1990–95**

Budget function	1990	1991	1992	1993	1994	1995
	[In millions of dollars]					
Total	11,288	12,405	12,973	13,440	13,552	13,772
National defense	964	1,188	1,147	1,323	1,174	1,181
Health	4,661	5,021	5,506	5,700	5,889	6,068
Space research and technology	1,389	1,479	1,499	1,588	1,796	1,614
Energy	761	878	921	917	921	930
General science	2,306	2,526	2,532	2,553	2,542	2,622
Natural resources and environment	336	389	383	376	224	187
Transportation	242	246	266	238	220	389
Agriculture	456	486	528	553	567	565
Education, training, employment, and social services	106	115	118	121	145	153
International affairs	4	6	6	8	6	0
Veterans benefits and services	16	16	16	16	16	16
Commerce and housing credit	31	39	35	34	38	35
Community and regional development	3	10	11	10	9	3
Administration of justice	9	6	5	5	5	9
Income security	0	0	0	0	0	0
General government	3	0	0	0	0	0
	[In millions of constant FY 1996 dollars]					
Total	13,118	13,876	14,141	14,308	14,123	14,047
National defense	1,120	1,329	1,250	1,408	1,224	1,205
Health	5,417	5,616	6,002	6,068	6,137	6,189
Space research and technology	1,614	1,654	1,634	1,690	1,872	1,647
Energy	884	982	1,004	976	960	949
General science	2,680	2,826	2,760	2,717	2,649	2,675
Natural resources and environment	390	435	417	400	233	190
Transportation	281	275	290	254	229	397
Agriculture	530	544	576	589	591	576
Education, training, employment, and social services	123	129	129	129	151	156
International affairs	5	7	7	9	6	0
Veterans benefits and services	19	18	17	17	17	16
Commerce and housing credit	36	44	38	37	40	36
Community and regional development	3	11	12	11	9	3
Administration of justice	10	7	5	5	6	9
Income security	0	0	0	0	0	0
General government	3	0	0	0	0	0

NOTES: Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.

Table 26d. **Federal budget authority for basic research, by budget function: fiscal years 1996–03**

Budget function	1996	1997	1998	1999	2000	2001	2002 preliminary	2003 proposed
	[In millions of dollars]							
Total	14,442	14,961	15,523	17,433	19,470	21,376	23,635	25,499
National defense	1,165	1,090	1,067	1,110	1,184	1,303	1,392	1,383
Health	6,395	6,852	7,356	8,634	10,099	11,642	13,193	14,379
Space research and technology	1,685	1,653	1,610	1,667	1,616	1,695	1,967	2,361
Energy[1]	1,182	1,288	34	36	36	40	68	57
General science[1]	2,662	2,753	4,121	4,464	4,722	5,187	5,398	5,649
Natural resources and environment	147	153	145	142	146	215	220	208
Transportation	456	420	411	358	542	17	13	25
Agriculture	547	548	571	602	651	749	808	831
Education, training, employment, and social services	140	142	133	99	107	112	115	117
International affairs	2	2	1	0	42	50	53	39
Veterans benefits and services[2]	13	14	23	263	266	289	329	351
Commerce and housing credit	37	34	35	41	39	50	52	73
Community and regional development	0	0	0	0	0	0	0	0
Administration of justice	12	13	16	18	20	27	27	25
Income security	0	0	0	0	0	0	0	0
General government	0	0	0	0	0	0	0	0
	[In millions of constant FY 1996 dollars]							
Total	14,442	14,675	15,014	16,644	18,213	19,544	21,146	22,411
National defense	1,165	1,069	1,032	1,059	1,107	1,191	1,246	1,215
Health	6,395	6,721	7,115	8,244	9,447	10,644	11,804	12,637
Space research and technology	1,685	1,621	1,557	1,591	1,512	1,550	1,760	2,075
Energy[1]	1,182	1,263	33	34	34	36	61	50
General science[1]	2,662	2,700	3,985	4,262	4,417	4,743	4,830	4,965
Natural resources and environment	147	150	141	136	137	197	197	183
Transportation	456	412	398	342	507	16	12	22
Agriculture	547	537	552	575	609	685	723	730
Education, training, employment, and social services	140	139	129	95	100	102	103	103
International affairs	2	2	1	0	39	46	47	34
Veterans benefits and services[2]	13	14	23	251	249	264	294	309
Commerce and housing credit	37	33	34	39	36	46	47	64

See explanatory notes and SOURCES at end of table

Table 26d. **Federal budget authority for basic research, by budget function: fiscal years 1996–03**

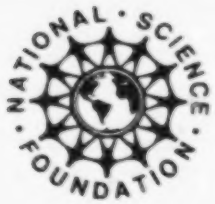
Budget function	1996	1997	1998	1999	2000	2001	2002 preliminary	2003 proposed
	[In millions of dollars]							
Community and regional development	0	0	0	0	0	0	0	0
Administration of justice	12	13	15	17	19	25	24	22
Income security	0	0	0	0	0	0	0	0
General government	0	0	0	0	0	0	0	0

[1] Beginning in FY 1998, a number of Department of Energy programs were reclassified from energy (270) to general science (251).

[2] The Department of Veterans Affairs (VA) submission to Office of Management, MAX Schedule C included both VA's medical care and research accounts. Also, prior to 1999, many of the VA R&D costs were counted as R&D facilities and therefore were not included in this table. Starting in 1999, the costs were shifted from R&D facilities to conduct of R&D due to a reclassification within R&D.

NOTES: Data for 1996–2001 are actual budget authority. Data for 2002 are preliminary estimates, and data for 2003 are proposed based on the fiscal year 2003 budget. Because of rounding, components may not add to totals. GDP implicit price deflators used to convert current dollars to constant 1996 dollars.

SOURCES: Agencies' submissions to Office of Management and Budget, MAX Schedule C; agency budget justification documents; and supplemental data obtained from agencies' budget offices.



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